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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,061	01/15/2002	Toren S. Davis	H0002526 (A66) US	1119

7590 07/16/2003

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EXAMINER

TORRES, MELANIE

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/050,061

Applicant(s)

DAVIS, TOREN S.

Examiner

Melanie Torres

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Christopher P. Schwartz
CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER

DETAILED ACTION

Claim Objections

1. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 duplicates the limitation in the last 2 lines of claim 5. Further, claim 11 duplicates the limitation in the last 2 lines of claim 10.

2. Claims 5 and 6 are objected to because of the following informalities:

In claim 5, line 5, "experiences" should be replaced by "experience."

In claim 6, line 1, "if" should be replaced by "of."

Appropriate correction is required.

3.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 5-7, and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Griffen et al.

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Re claims 5, 6, 10 and 11, Griffen et al. teaches a tuned mass damper comprising a mass having predetermined inertia properties and a plurality of isolators (hexapod/secondary suspension) arranged in a hexapod configuration, each isolator having at least a first end and a second end, each isolator first end coupled to the mass (Secondary mass) and each isolator second end adapted to couple to a structure (Base) that may experience vibrations in six independent degrees of freedom, wherein each of the isolators in combination with the mass, is individually tuned to reduce the vibrations experienced by the structure. (Fig. 9, Column 1, line 67 – Column 2, line 9, Column 7, lines 18-21)

Re claims 7 and 12, Griffen et al. teaches wherein each of the isolators, in combination with the mass, is individually tuned such that a combination of two or more isolators reduces a particular frequency. It is the examiner's position that this would be an inherent feature of the structure.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Griffen et al. in view of Cunningham et al.

Re claims 8 and 13, Griffen et al. teach wherein each isolator second end is adapted to couple the structure at a predetermined location thereon. However, Griffen et al. do not teach wherein each isolator comprises a spring having an adjustable spring constant, and wherein each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple. Cunningham et al. teaches wherein each isolator comprises a spring having an adjustable spring constant, and wherein each isolator is individually tuned by adjusting its spring constant and the predetermined location on the structure to which its second end will couple as is acknowledged by applicant on page 2, lines 17-21. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have tuned and adjusted each isolator to provide the desired vibration isolation in six degrees of freedom.

8. Claims 9 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffen et al. in view of Gran et al.

Re claim 9, Griffin et al. does not teach wherein the isolators comprise tubular damping struts with first and second spherical pivots at opposite ends of the tubular damping strut. Gran et al. teaches isolators comprise tubular damping struts (6) with first and second spherical pivots at opposite ends of the tubular damping strut in a hexapod configuration. (Fig. 2, 6) The examiner takes official notice that it would have been obvious to one of ordinary skill in the art at the time the invention was made to

have used the isolators and pivots of Gran et al. in the assembly of Griffin et al. as the use of damping struts and pivots is well known in hexapod assemblies.

Response to Arguments

9. Applicant's arguments filed May 29, 2003 have been fully considered but they are not persuasive.

It is the examiner's position that as broadly claimed, Griffen et al. teaches the limitations of applicant's claimed invention. Griffen et al. Specifically states wherein "By designing the secondary system with a hexapod suspension, for example, the isolation system can be used to attenuate the response of multiple modes (resonances) of the primary structure." See Column 7, line 14 – Column 8, line 1. Inherently the isolators in combination with the mass would be individually tuned to reduce vibrations experienced in the structure. This is exactly the purpose of the system of Griffen et al. and the examiner fails to see how this damper differs from applicant's damper.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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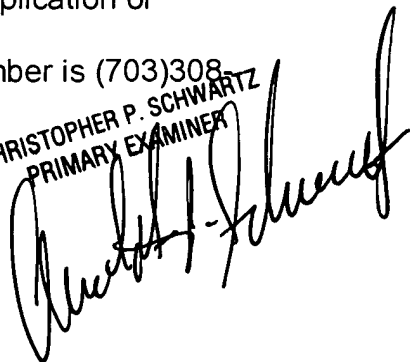
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703)308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-2571 for regular communications and (703)308-2571 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

CHRISTOPHER P. SCHWARTZ
PRIMARY EXAMINER



MT
July 1, 2003